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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/976,642 | 10/11/2001 | Robert E. Haines | 10007583-1 | 2054 |

7590 08/05/2004

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
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EXAMINER

POND, ROBERT M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3625

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/976,642

Applicant(s)

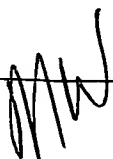
HAINES ET AL.

Examiner

Robert M. Pond

Art Unit

3625



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/11/01; 6/27/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: P6, S61-S68, and Fig. 7. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:
Specification omits disclosure pertaining to Figure 7 in the Brief Description of the Drawings. Appropriate correction is required.

Art Unit: 3625

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 21-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

If the signal claim is interpreted as an abstract arrangement "to be transmitted", or as a transmission in transit, rather than a physical signal statically embedded in a physical computer readable medium, the signal claim is considered non-statutory. A signal is insubstantial and therefore neither concrete nor tangible. It is a pattern that is evident over a period of time by measuring the changes in level of some attribute, such as voltage or current, at a given point. A signal in transmission is none of a process, machine, manufacture, or composition of matter, or any new and useful improvement thereof. It is information transmitted as energy, encoded to endow it with intelligible patterns for subsequent interpretation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-4, 7-11, and 14-19 are rejected under 35 USC 103(a) as being unpatentable over Manchala et al. (patent number 6,405,178 hereinafter referred to as "Manchala"), in view of Office World News (PTO-892, Item: U hereinafter referred to as "OWN").**

Manchala teaches an electronic computer printer notifying a network application of low toner or low paper events based on predetermined thresholds. Manchala teaches communications crossing firewalls, secure email, and electronic payment methods (see at least col. 1, lines 35-62; col. 5, lines 12-16). Manchala further teaches:

- *Determining that an amount of consumable associated with the peripheral device has decreased below a predetermined threshold;*

Printer reaches a predetermined threshold of low paper or low toner and then sends an event notification to the notification service (see at least col. 1, lines 5-6; col. 2, lines 41-44; col. 3, lines 31-36; col. 4, lines 15-22; col. 6, lines 8-11).

- Transmitting an email from the peripheral device to order additional supplies of the consumable.

Manchala teaches all the above as noted under the 103(a) rejection and teaches a) automatically placing an order for additional supplies when a printer communicates a low toner event notification to the network application, b) the network application using secure email to communicate with consumable suppliers, but does not disclose the printer sending the email. OWN teaches Hitachi Koki Imaging Solutions forging new links with office equipment dealers and their customers with the revolutionary communications capabilities of Internet-enabled copiers and printers (i-printers) (U: see page 1). OWN teaches i-printers being digital print engines incorporating Hitachi's new Internet Document Controller architecture (please note examiner's interpretation: print engines are electronically controlled), and further teaches the printer sending early warning notifications for consumables replenishment via a page or email without user interaction (U: see page 2). Therefore it would have been obvious to one of ordinary skill in the art at time of the invention to modify the method of Manchala to implement a web-enabled printer with hard copy print engine and notification using email as taught by OWN, in order to provide cost effective printer service support capability and convenience for users.

- Computer-usable medium: hard disk in the printer (see at least col. 4, lines 18-21).

Pertaining to computer-usable medium Claims 8-11 and 14

Rejection of Claims 8-11 and 14 is based on the same rationale as noted above.

Pertaining to system Claims 15-19

Rejection of Claims 15-19 is based on the same rationale as noted above.

- 6. Claims 5, 6, 12, 13, and 20 are rejected under 35 USC 103(a) as being unpatentable over Manchala (patent number 6,405,178) and OWN (PTO-892, Item: U), as applied to Claims 1, 8, and 15.**

Manchala and OWN teach all the above as noted under the 103(a) rejection and teach a) prior art practice of a printer notifying an operator of a damaged disk that needs replacement service (see at least col. 1, lines 6-8, 16-20), b) the network application receiving communications from vendors regarding maintenance (see at least col. 2, lines 59-60), c) the printer generating an event notification to the network application pertaining to a damaged part (e.g. hard disk) needing replacement (see at least col. 4, lines 18-21), d) the vendor sending regular maintenance reminders, and further teach the printer being programmed to send early notifications requesting preventive maintenance via email. Manchala and OWN, however, do not specifically disclose the printer transmitting an email to request periodic maintenance. It would have been obvious to one of ordinary skill in the art at time of the invention to disclose the printer requesting periodic maintenance, since one of ordinary skill would

Art Unit: 3625

ascertain the need for regular maintenance notification in order to implement preventive maintenance measures to minimize printer downtime due to aging mechanical parts (e.g. damaged hard disk in the printer), and thereby attract users to the printer due to higher availability.

Manchala and OWN teach all the above as noted under the 103(a) rejection and teach a) generating an event notification based on predetermined threshold indicating low consumables (e.g. toner, paper), b) tracking usage statistics, and further teach the printer requesting periodic service, but do not disclose determining predetermined work threshold. It would have been obvious to one of ordinary skill in the art at time of the invention to disclose determining a predetermined threshold of work, since one of ordinary skill in the art would ascertain that consumption of toner or paper are indications of printer workload, and therefore can be used to determine a predetermined work threshold.

Pertaining to computer-usable medium Claims 12 and 13

Rejection of Claims 12 and 13 is based on the same rationale as noted above.

Pertaining to system Claim 20

Rejection of Claim 20 is based on the same rationale as noted above.

- 7. Claims 21-24 and 27 are rejected under 35 USC 103(a) as being unpatentable over Manchala (patent number 6,405,178) and OWN (PTO-892, Item: U).**

Art Unit: 3625

Manchala teaches an electronic computer printer notifying a network application of low toner or low paper events based on predetermined thresholds. Manchala teaches communications crossing firewalls, secure email, and electronic payment methods (see at least col. 1, lines 35-62; col. 5, lines 12-16). Manchala further teaches:

- Determining that an amount of consumable associated with the peripheral device has decreased below a predetermined threshold;

Printer reaches a predetermined threshold of low paper or low toner and then sends an event notification to the notification service (see at least col. 1, lines 5-6; col. 2, lines 41-44; col. 3, lines 31-36; col. 4, lines 15-22; col. 6, lines 8-11).

- Transmitting an email from the peripheral device to order additional supplies of the consumable.

Manchala teaches all the above as noted under the 103(a) rejection and teaches a) automatically placing an order for additional supplies when a printer communicates a low toner event notification to the network application, b) the network application using secure email to communicate with consumable suppliers, but does not disclose the printer sending the email. OWN teaches Hitachi Koki Imaging Solutions forging new links with office equipment dealers and their customers with the revolutionary communications capabilities of Internet-enabled copiers and printers (i-printers) (U: see page 1). OWN teaches i-printers being digital print engines incorporating Hitachi's new Internet Document Controller

architecture (please note examiner's interpretation: print engines are electronically controlled), and further teaches the printer sending early warning notifications for consumables replenishment via a page or email without user interaction (U: see page 2). Therefore it would have been obvious to one of ordinary skill in the art at time of the invention to modify the method of Manchala to implement a web-enabled printer with hard copy print engine and notification using email as taught by OWN, in order to provide cost effective printer service support capability and convenience for users.

Manchala and OWN teach all the above as noted under the 103(a) rejection and teach a) signals that control a counter, and b) web-enabled printers containing embedded computers and hardcopy print engines. It would have been obvious to one of ordinary skill in the art at time of the invention to disclose electronic signals, since one of ordinary skill in the art can ascertain that electronic computer operation as taught by Manchala and OWN depends on electronic signal transmissions.

- 8. Claims 25 and 26 are rejected under 35 USC 103(a) as being unpatentable over Manchala (patent number 6,405,178) and OWN (PTO-892, Item: U), as applied to Claims 21.**

Manchala and OWN teach all the above as noted under the 103(a) rejection and teach a) prior art practice of a printer notifying an operator of a damaged disk that needs replacement service (see at least col. 1, lines 6-8, 16-20), b) the

network application receiving communications from vendors regarding maintenance (see at least col. 2, lines 59-60), c) the printer generating an event notification to the network application pertaining to a damaged part (e.g. hard disk) needing replacement (see at least col. 4, lines 18-21), d) the vendor sending regular maintenance reminders, and further teach the printer being programmed to send early notifications requesting preventive maintenance via email. Manchala and OWN, however, do not specifically disclose the printer transmitting an email to request periodic maintenance. It would have been obvious to one of ordinary skill in the art at time of the invention to disclose the printer requesting periodic maintenance, since one of ordinary skill would ascertain the need for regular maintenance notification in order to implement preventive maintenance measures to minimize printer downtime due to aging mechanical parts (e.g. damaged hard disk in the printer), and thereby attract users to the printer due to higher availability.

Manchala and OWN teach all the above as noted under the 103(a) rejection and teach a) generating an event notification based on predetermined threshold indicating low consumables (e.g. toner, paper), b) tracking usage statistics, and further teach the printer requesting periodic service, but do not disclose determining predetermined work threshold. It would have been obvious to one of ordinary skill in the art at time of the invention to disclose determining a predetermined threshold of work, since one of ordinary skill in the art would ascertain that consumption of toner or paper are indications of printer workload, and therefore can be used to determine a predetermined work threshold.

Art Unit: 3625

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- US 6,333,790 (Kageyama) 25 December 2001; teaches a first computer, second computer, and a printer connected via the Internet.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Mr. Robert M. Pond** whose telephone number is 703-605-4253. The examiner can normally be reached Monday-Friday, 8:30AM-5:30PM Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mr. Vincent Millin** can be reached on 703-308-1065.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Receptionist** whose telephone number is **703-308-1113**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

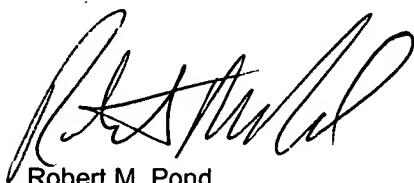
Washington D.C. 20231

or faxed to:

703-872-9306 (Official communications; including After Final communications labeled "Box AF")

Art Unit: 3625

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal
Drive, Arlington, VA, 7th floor receptionist.

A handwritten signature in black ink, appearing to read 'R. M. Pond', written in a cursive style.

Robert M. Pond
Patent Examiner
August 2, 2004